Curriculum Design Research of Project Teaching

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Abstract. The project teaching is a kind of active participation of students, collaboration, explore new teaching mode innovation. Project teaching of "project as the main line, teacher as guide and students as the main body" has become a reality. In the process of project practice, the students need to understand and grasp the course requirements of knowledge and skills, and the students need to experience the hardships and fun of innovation. The idea and way of students to analyze and solve problems has been to develop. In this article, the project teaching is carried on the simple introduction; the basic ways of curriculum design are discussed; the main principles of course design are analyzed for project teaching. Finally, the course design of project teaching is a dynamic process; the course design of project teaching needs to workplace practices for conductor, and the course design of items need to be closely linked to the professional ability and comprehensive quality of students.

Introduction

With the rapid development of our economy, the forms of network, informatization, diversified and higher education have more contact. Project teaching has the obvious advantage in training students' comprehensive ability for higher vocational colleges. One prominent feature of the project teaching is "project as the main line, teacher as guide and students as the main body". By participating in specific projects, students understand and grasp the whole process and the basic requirements in every aspect. Therefore, project teaching has many advantages, such as short training period, good controllability, pay attention to the combination of theory and practice, etc. Project teaching is a kind of active participation, autonomy, cooperation, explore new teaching mode innovation [1]. In the process of project practice, the students understand and grasp the course requirements of knowledge and skills, to experience the hardships and fun innovation. The idea and way of students to analyze and solve problems has been to develop.

Basic Ways of Curriculum Design

Through the practice research, the curriculum design of project teaching has a certain way. The basic idea of curriculum design mainly includes the four [2]. These methods are also the basic principles of curriculum design. In summary, mainly divides into: task is priority, the integration of project was carried out, the target is a progressive step by step; experience is also step by step. Summarize method. In project driven curriculum system, integrity is the most critical of the project. In the curriculum design, the project is not an isolated activity. Project is to achieve a certain goal and collection of tasks. All kinds of tasks need to be integrated in the project selection and design of the whole [3]. The integration of various mission objectives agreed upon in the overall goal of the project. Course tasks need more considering the students' ability development of teaching order and convenience of the organization. In the course design of the project, specific work requires a combination of job task organization rules and laws of students' learning and teaching. Differences in
different project to the students' vocational ability is different, the choice of project need to consider different curriculum settings.

**Task priority method.** Project teaching in the curriculum design is according to from the overall to local, from comprehensive to the analysis of the path. This method is a kind of comes from students' future career position requirements [4]. This method around the professional task set and its supporting course. In the process of the curriculum, the task priority methods need to be the core of theory of knowledge as much as possible to prepare to the specific project. In practice, the student to the theoretical knowledge learning just can have better effect. The requirements of task priority method are based on task as a reference point for the curriculum. This method requires a specific set according to the work tasks and professional ability. At the same time, the need for independent setting the course project, that can be directly converted into a certain course.

**Target layer set method.** The opening goal has the uniqueness and the uncertainty of the project, therefore to project as the carrier set course must have its clear. In this way can make the project curriculum more rational, scientific and standardized. Project curriculum design is based on project curriculum as the subject, therefore, the aim of design is that there are levels of sexuality. Among them, the goal is at the next higher level for the purpose of target of the next level [5]. The primary goal is to target at the next higher level. If the level is very low, so design goal will be more specific. From the project itself, the description of the project goals need from abstract to concrete, it determines the course design of a certain level. From the process of project implementation to the goal implementation also need four levels.

**Experience progressive method.** Experience progressive methods mainly according to the students' development sequence course of the implementation of the order [6]. This method combined with students' experience, to better construct the students' knowledge system. The traditional teaching mode of curriculum is according to the application from general to specific, from base to order, from theory to practice. Project curriculum development, according to the construction of student experience law, from specific to general, by the application to the base, a process of progressive experience from practice to theory. This method can better promote the construction of students' knowledge system.

**Main Principles of Course Design**

Project teaching curriculum design should follow certain principles. Based on the existing course system of mechanical and electrical, project teaching of the construction of the course is designed for the general. The curriculum design of the main principle is shown in figure 1.

![Figure 1. Course Design Principle of Project Teaching.](image)
Principle of relevance. In higher vocational colleges, the purpose of training is to deliver high quality skilled talents for production, service and management. Production involves multiple link, is the purpose of manufacturing products [7]. Service is a paid or unpaid activity; services, mainly to do things for others, and make the benefit of others. And services in the service is not provide physical labor, the labor can meet others some special needs. Management is through the implementation of planning, organizing, equipped with, such as leadership, control function to coordinate the activities of others. Whether in the field of culture which applied and skilled talents, project curriculum should be directed to the talent training goal. Project curriculum is a service implementation services for the talent in the future of "production", "service activity", "management” activities. Project of curriculum system should be a kind of activity system.

Principle of developmental. Project curriculum design should have developmental, at the same time, its development direction is also diversified. Curriculum design, curriculum content, these should not only with the industry technology level synchronization, and advance [8]. Have certain forward-looking curriculum design project. Projects of curriculum design need to pay attention to students' ability to direct employment. Projects of curriculum design need to pay attention to the sustainable development of students' career. Projects of curriculum design need to cultivate the students' consciousness of sustainable development, at the same time, project curriculum design and improve students' ability of sustainable development.

Principle of systemic. In the traditional curriculum design, theoretical system and practice system has a certain distance. Traditional curriculum design causes the student to obtain knowledge is fragmented [9]. Project curriculum design is an organic synthesis as a whole. In the course design of project, each link is connected with each other, the development of students' future career needs to be carried on the close attention, interdisciplinary, between various types; all kinds of education teaching activities have a direct link.

Principle of directional property. Project teaching talents training is the goal of the overall requirements of professional talents. Therefore, training target must be accurate positioning, project curriculum design will be more reasonable and feasible [10]. The content of the course design must be clear to develop a target of employ ability skills, knowledge and attitudes. The initial position location is project curriculum design work. All the projects and the choice of curriculum design, curriculum content should be directed to cultivate talents.

Dynamic principle. With the rapid development of social economy, raises the object of interest is also increasingly widely. In the field of politics, economy, science and technology, culture and so on new change, all of these requirements as soon as possible are reflected in the curriculum. Project curriculum design should have update mechanism; at the same time, the curriculum will also be able to face the changing social needs. Project curriculum design need to establish a flexible mechanism to adapt to the development of social economy.

Creative principle. Social development demands college cultivate a certain number of applied talents by constantly learning new knowledge, new technology, new method to analyze problems creatively, to solve the problem. Project curriculum design must serve the cultivation of the talent innovation spirit and ability. Project curriculum design should highlight the student individuality, and the design should attach great importance to the development of students' potential.

Principle of diversity. Project curriculum design is diverse. Because of professional various type and different students’ demand, higher education must provide a wide variety of courses and course plan. Different types of curriculum structure and content are different. Project course design and project development is rapid growth in the universities. In practice, many of the "curriculum design" was developed. This is the inevitable result of the practice exploration, it is also reasonable.

Structural principle. The design of each project has a certain hierarchy. Project of the course is composed of a variety of factors. Between these elements can form a new structure, the structure is composed of many elements. Between various levels of each factor can be significant or potential interactions. Project design different administered course system, this design has a unique structure.
Conclusion

Project teaching in training students' comprehensive ability has the obvious advantage in higher vocational colleges. One prominent feature of the project teaching is "project as the main line, teacher as guide and students as the main body". By participating in specific projects, students understand and grasp the whole process and the basic requirements in every aspect. In the process of project practice, the students understand and grasp the course requirements of knowledge and skills, to experience the hardships and fun innovation. The idea and way of students to analyze and solve problems has been to develop. In this article, the project teaching is carried on the simple introduction; the basic ways of curriculum design are discussed; project design principle for teaching course is analyzed. The project teaching of the curriculum design is a dynamic process, project teaching curriculum design needs to workplace practices for conductor, teaching curriculum design items need to be closely linked to the professional ability and comprehensive quality of students. Project teaching curriculum design research is of great significance for the curriculum reform of vocational colleges and the cultivation of students' innovative ability.

References


